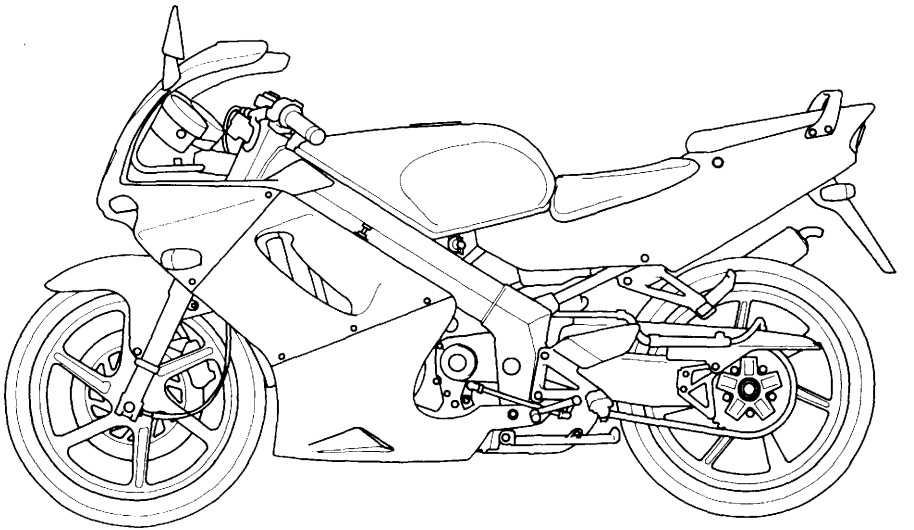
HONDA For the new horizons

NSR 150 SP



33 KW6N E1 ASH

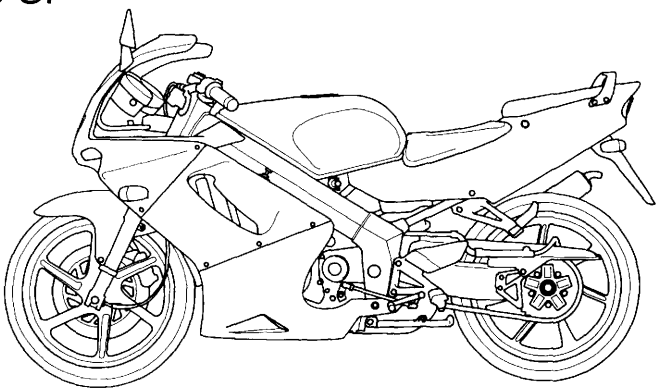
http://mototh.com

NOISE CONTROL SYSTEM (AUSTRALIA ONLY)

TAMPERING WITH THE NOISE CONTROL SYSTEM IS PROHIBITED: Owners are warned that the law may prohibit: (a) The removal or rendering inoperative by any person other than for the purposes of maintenance, repair or replacement, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use; and (b) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

http://mototh.com

OWNER'S MANUAL
NSR 150 SP



All information in this publication is based on the latest production information available at the time of approval for printing. HONDA MOTOR CO., LTD. reserves the right to make changes at any time without notice and without incurring any obligation. No part of this publication may be reproduced without written permission.

http://mototh.com

http://mototh.com

IMPORTANT NOTICE

- **OPERATOR AND PASSENGER**
  This motorcycle is designed to carry the operator and one passenger. Never exceed the maximum weight capacity as shown on the tyre information label.
- **ON-ROAD USE**
  This motorcycle is designed to be used only on the road.
- **READ THIS OWNER'S MANUAL CAREFULLY**
  Pay special attention to statements preceded by the following words:

⚠ WARNING

Indicates a strong possibility of severe personal injury or death if instructions are not followed.

CAUTION :

Indicates a possibility of personal injury or equipment damage if instructions are not followed.

NOTE : Gives helpful information.

This manual should be considered a permanent part of the motorcycle and should remain with the motorcycle when resold.

http://mototh.com

WELCOME

The motorcycle presents you a challenge to master the machine, a challenge to adventure. You ride through the wind, linked to the road by a vehicle that responds to your commands as no other does. Unlike an automobile, there is no metal cage around you. Like an airplane, a pre-ride inspection and regular maintenance are essential to your safety. Your reward is freedom.

To meet the challenges safely, and to enjoy the adventure fully, you should become thoroughly familiar with this owner's manual BEFORE YOU RIDE THE MOTORCYCLE.

When service is required, remember that your Honda dealer knows your motorcycle best. If you have the required mechanical "know-how" and tools, your dealer can supply you with an official Honda Service Manual to help you perform many maintenance and repair tasks.

Pleasant riding, and thank you for choosing a Honda !

http://mototh.com

OPERATION

Page

1. MOTORCYCLE SAFETY
1. Safe Riding Rules
2. Protective Apparel
2. Modifications
3. Loading and Accessories

6. PARTS LOCATION
9. Instruments and Indicators

15. MAJOR COMPONENTS
(Information you need to operate this motorcycle)
15. Brakes
19. Clutch
21. Coolant

Page

23. Fuel
27. Engine Oil
29. Tubeless tyres

32. ESSENTIAL INDIVIDUAL COMPONENTS
32. Ignition Switch
33. Right Handlebar Controls
34. Left Handlebar Controls

35. FEATURES
(Not required for operation)
35. Steering Lock
36. Seat
37. Helmet Holder

Page

38. Document Bag
39. Side Cover
40. Middle Fairing
41. Lower Fairing
42. Inner Fairing

43. OPERATION
43. Pre-ride Inspection
44. Starting the Engine
47. Running-in
48. Riding
49. Braking
50. Parking
51. Anti-theft Tips

http://mototh.com

MAINTENANCE

Page

52. MAINTENANCE
53. Maintenance Schedule
56. Tool Kit
57. Serial Numbers
58. Maintenance Precautions
59. Maintenance Stand
61. Transmission Oil
64. Spark Plugs
66. Throttle Operation
68. Idle Speed
69. Drive Chain
73. Drive Chain Slider
74. Side Stand

Page

75. Brake Pad Wear
77. Wheel Removal
81. Battery
84. Fuse Replacement
86. Bulb Replacement
90. Stoplight Switch Adjustment

91. CLEANING

93. STORAGE GUIDE
93. Storage
95. Removal From Storage

96. SPECIFICATIONS

http://mototh.com

MOTORCYCLE SAFETY

⚠ WARNING

- **Motorcycle riding requires special efforts on your part to ensure your safety. Know these requirements before you ride:**

SAFE RIDING RULES

1. Always make a pre-ride inspection (page 43) before you start the engine. You may prevent an accident or equipment damage.
2. Many accidents involve inexperienced riders. Most countries require a special motorcycle riding test or license. Make sure you are qualified before you ride. NEVER lend your motorcycle to an inexperienced rider.
3. Many automobile/motorcycle accidents happen because the automobile driver does not "see" the motorcyclist.

Make yourself conspicuous to help avoid the accident that wasn't your fault:

- Wear bright or reflective clothing.
- Don't ride in another motorist's "blind spot."

4. Obey all national and local laws and regulations.
   - Excessive speed is a factor in many accidents. Obey the speed limits, and NEVER travel faster than conditions warrant.
   - Signal before you make a turn or lane change. Your size and maneuverability can surprise other motorists.
5. Don't let other motorists surprise you. Use extra caution at intersections, parking lot entrances and exits, and driveways.
6. Keep both hands on the handlebars and both feet on the footpegs while riding. A passenger should hold on to the motorcycle or the operator with both hands and keep both feet on the passenger footpegs.

http://mototh.com

PROTECTIVE APPAREL

1. Most motorcycle accident fatalities are due to head injuries: ALWAYS wear a helmet. You should also wear a face shield or goggles as well as boots, gloves and protective clothing. A passenger needs the same protection.
2. The exhaust system becomes hot during operation, and it remains hot for a while after stopping the engine. Be careful not to touch the exhaust system while it is hot. Wear clothing that fully covers your legs.
3. Do not wear loose clothing which could catch on the control levers, footpegs or wheels.

MODIFICATIONS

⚠ WARNING

- **Modification of the motorcycle, or removal of original equipment, may render the vehicle unsafe or illegal. Obey all national and local equipment regulations.**

http://mototh.com

LOADING AND ACCESSORIES

⚠ WARNING

- **To prevent an accident, use extreme care when adding and riding with accessories and cargo. Addition of accessories and cargo can reduce a motorcycle's stability, performance and safe operating speed. Never ride an accessory-equipped motorcycle at speeds above 130 km/h (80 mph). And remember that this 130 km/h (80 mph) limit may be reduced by installation of non-Honda accessories, improper loading, worn tyres and overall motorcycle condition, poor road or weather conditions. These general guidelines may help you decide whether or how to equip your motorcycle and how to load it safely.**

Loading

1. Keep cargo and accessory weight low and close to the center of the motorcycle. Load weight equally on both sides to minimize imbalance. As weight is located further from the motorcycle's center of gravity, handling is proportionally affected.
2. Adjust tyre pressure (page 29) to suit load weight and riding conditions.

http://mototh.com

3. Vehicle handling and stability can be adversely affected by loose cargo. Recheck cargo security and accessory mounts frequently.
4. Do not attach large or heavy items (such as a sleeping bag or tent) to the handlebars, fork, or fender. Unstable handling or slow steering response may result.

Accessories

Genuine Honda accessories have been specifically designed for and tested on this motorcycle. Because the factory cannot test all other accessories, you are personally responsible for proper selection, installation, and use of non-Honda accessories. Always follow the guidelines under Loading, and these:

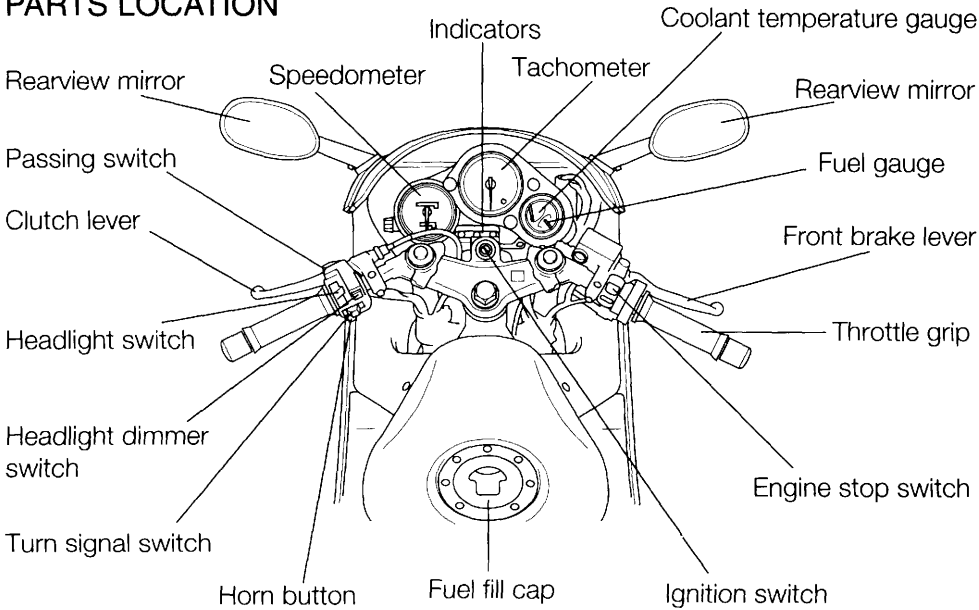
1. Carefully inspect the accessory to make sure it does not obscure any lights, reduce ground clearance and banking angle, or limit suspension travel, steering travel or control operation.
2. Large fork-mounted fairings or windshields, or poorly designed or improperly mounted fairings can produce aerodynamic forces that cause unstable handling. Do not install fairings that decrease cooling air flow to the engine.

http://mototh.com

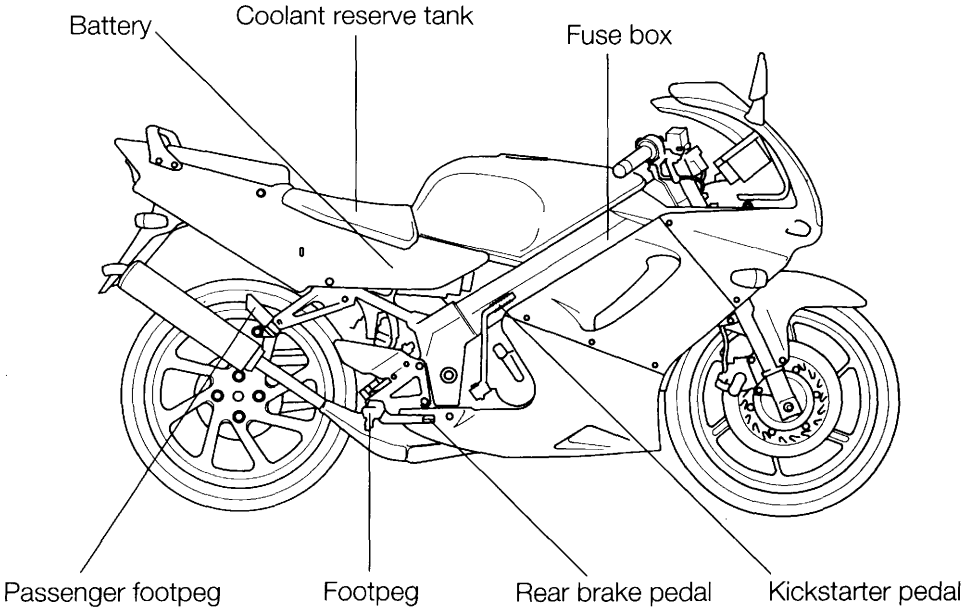
3. Accessories which alter your riding position by moving hands or feet away from controls may increase reaction time in an emergency.
4. Do not add electrical equipment that will exceed the motorcycle's electrical system capacity. A blown fuse could cause a dangerous loss of lights or engine power.
5. This motorcycle was not designed to pull a sidecar or trailer. Handling may be seriously impaired if so equipped.
6. Any modification of the cooling system may cause overheating and serious engine damage. Do not modify the radiator shrouds or install accessories which block or deflect air away from the radiator.

http://mototh.com

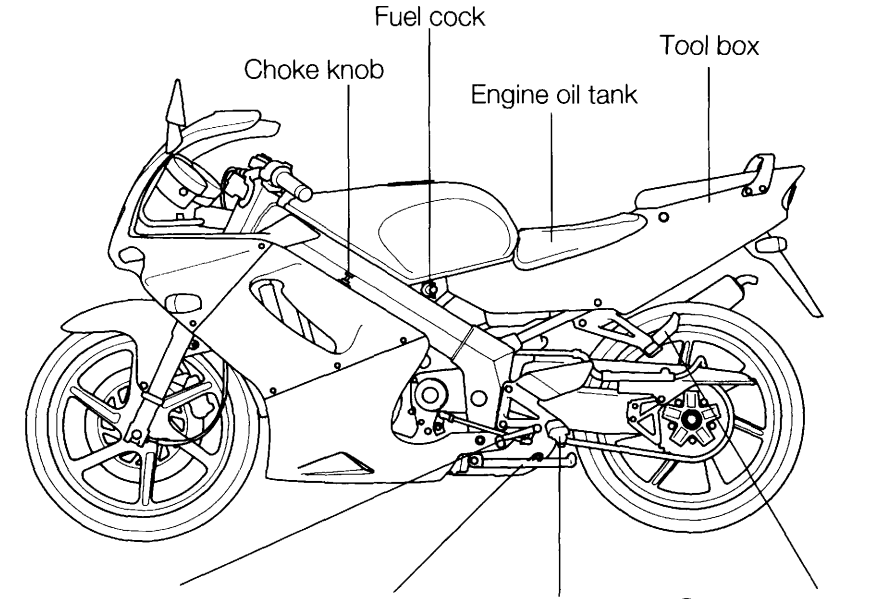
PARTS LOCATION



http://mototh.com



http://mototh.com

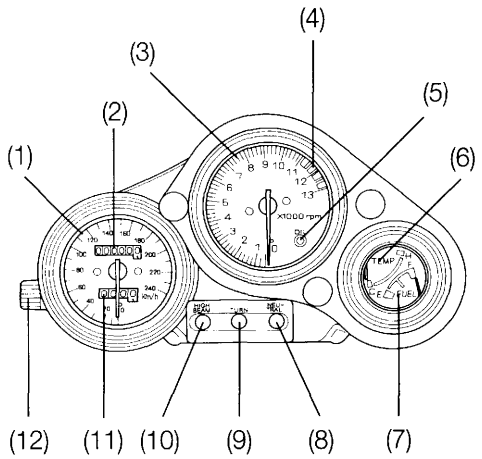


http://mototh.com

INSTRUMENT AND INDICATORS

The indicators are located within and near the instrument panel.
Their functions are described in the table on the following page.

(1) Speedometer
(2) Odometer
(3) Tachometer
(4) Tachometer red zone
(5) Low oil level indicator
(6) Coolant temperature gauge
(7) Fuel gauge
(8) Neutral indicator
(9) Turn signal indicator
(10) High beam indicator
(11) Tripmeter
(12) Tripmeter reset knob



http://mototh.com

Ref. No.	Description	Function
(1)	Speedometer	Shows riding speed.
(2)	Odometer	Shows accumulated mileage.
(3)	Tachometer	Shows engine rpm.
(4)	Tachometer red zone	Never allow the tachometer needle to enter the red zone, even after the engine has been broken in. **CAUTION :** • **Running the engine beyond recommended maximum engine speed (tachometer red zone) can damage the engine.**
(5)	Low oil level indicator	Lights when oil level is low (see page 12).

http://mototh.com

Ref. No.	Description	Function
(6)	Coolant temperature gauge	Shows coolant temperature. (see page 13).
(7)	Fuel gauge	Shows approximate fuel supply available (see page 14).
(8)	Neutral indicator	Lights when the transmission is in neutral.
(9)	Turn signal indicator	Flashes when either turn signal is operated.
(10)	High beam indicator	Lights when the head light is on high beam.
(11)	Tripmeter	Shows mileage per trip.
(12)	Tripmeter reset knob	Resets tripmeter to zero (0) by turning the knob in direction shown.

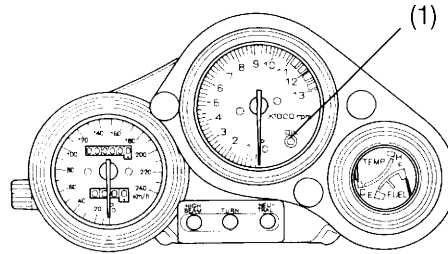
http://mototh.com

Low Oil Level Indicator

The low oil level indicator (1) lights when the 2-stroke engine oil is below approximately:

⚠ WARNING

- **If the low oil level indicator comes on while riding, stop riding and shut the engine off. Fill the oil tank to the UPPER level ridge with the recommended oil (page 28). Continuing to ride with a low oil level may lead to engine failure that could result in an accident.**

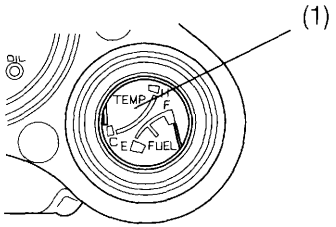


(1) Low oil level indicator

http://mototh.com

Coolant Temperature Gauge

When the needle begins to move above the C (Cold) mark, the engine is warm enough for the motorcycle to be ridden. The normal operating temperature range is within the section between the H and C marks. If the needle reaches the H (Hot) mark, stop the engine and check the reserve tank coolant level. Read page 21-22 and do not ride the motorcycle until the problem has been corrected.



(1) Coolant temperature gauge

CAUTION :

- **Exceeding maximum running temperature may cause serious engine damage.**

http://mototh.com

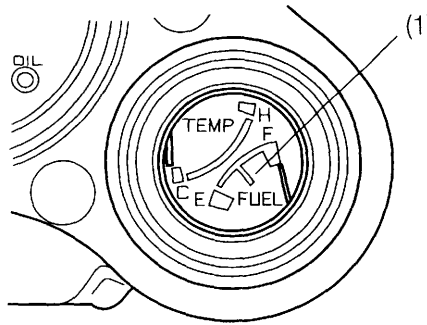
Fuel Gauge

The fuel gauge (1) shows the approximate fuel supply available. At F (Full), the fuel tank capacity including reserve is :

10.5 l (2.8 US gal, 2.3 Imp gal)

When the gauge needle first points to RES, refill the tank as soon as possible. At RES there is :

2.7 l (0.7 US gal, 0.6 Imp gal)



(1) Fuel gauge

http://mototh.com

MAJOR COMPONENTS

(Information you need to operate this motorcycle)

⚠ WARNING

- **If the Pre-ride Inspection (page 43) is not performed, severe personal injury or vehicle damage may result.**

BRAKES

Both the front and rear brakes are the hydraulic disc types.

As the brake pads wear, the brake fluid level drops. There are no adjustments to perform, but fluid level and pad wear must be inspected periodically. The system must be inspected frequently to ensure there are no fluid leaks. If the control lever or pedal free travel becomes excessive and the brake pads are not worn beyond the recommended limit (page 75), there is probably air in the brake system and it must be bled. See your authorized Honda dealer for this service.

Front Brake

Front Brake Fluid Level:

⚠ WARNING

- **Brake fluid may cause irritation. Avoid contact with skin or eyes. In case of contact, flush thoroughly with water and call a doctor if your eyes were exposed.**
- **KEEP OUT OF REACH OF CHILDREN.**

CAUTION :

- **Handle brake fluid with care because it can damage plastic and painted surfaces. When adding brake fluid, be sure the reservoir is horizontal before the cap is removed or brake fluid may spill out.**
- **Use only DOT 3 or 4 brake fluid from a sealed container.**
- **Never allow contaminants such as dirt or water to enter the brake fluid reservoir.**

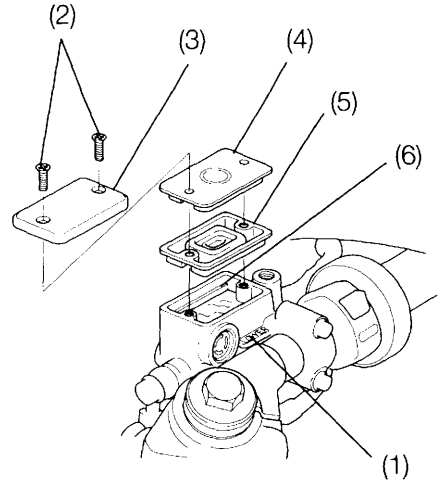
http://mototh.com

Check that the fluid level is above the LOWER level mark (1) with the motorcycle in an upright position.

Brake fluid must be added to the reservoir whenever the fluid level begins to reach the LOWER level mark (1). Remove the screws (2), reservoir cover (3), diaphragm plate (4), diaphragm (5), and float (6). Fill the reservoir with DOT 3 or 4 BRAKE FLUID from a sealed container up to the upper level mark (7). Reinstall the float, diaphragm, diaphragm plate, and cover. Tighten the screws securely.

Other Checks :

Make sure there are no fluid leaks. Check for deterioration or cracks in the hoses and fittings.



(1) LOWER level mark
(2) Screws
(3) Reservoir cover
(4) Diaphragm plate
(5) Diaphragm
(6) Float

http://mototh.com

Rear Brake

Rear Brake Fluid Level:

⚠ WARNING

- **Brake fluid may cause irritation. Avoid contact with skin or eyes. In case of contact, flush thoroughly with water and call a doctor if your eyes were exposed.**
- **KEEP OUT OF REACH OF CHILDREN.**

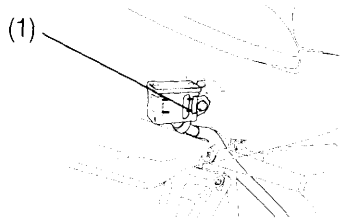
CAUTION :

- **Handle brake fluid with care because it can damage plastic and painted surfaces. When adding brake fluid, be sure the reservoir is horizontal before the cap is removed or brake fluid may spill out.**
- **Use only DOT 3 or 4 brake fluid from a sealed container.**
- **Never allow contaminants such as dirt or water to enter the brake fluid reservoir.**

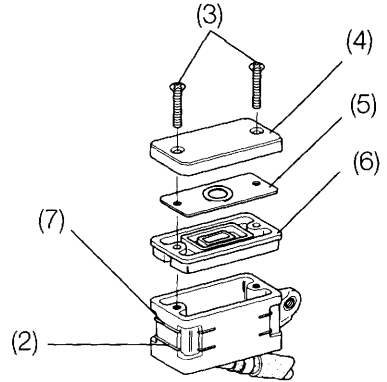
http://mototh.com

Check the brake fluid level from the inspection window (1) of the right side cover with the motorcycle in an upright position.

Brake fluid must be added to the reservoir whenever the fluid level begins to reach the LOWER level mark (2). Remove the right side cover (page 39). Remove the screws (3), reservoir cover(4), diaphragm plate (5) and diaphragm (6). Fill the reservoir with DOT 3 or 4 BRAKE FLUID from a sealed container up to the UPPER level mark (7). Reinstall the diaphragm, diaphragm plate and cap securely.



(1) Inspection window



(2) LOWER level mark
(3) Screws
(4) Reservoir cover
(5) Diaphragm plate
(6) Diaphragm
(7) UPPER level mark

Other Checks :

Make sure there are no fluid leaks. Check for deterioration or cracks in the hoses and fittings.

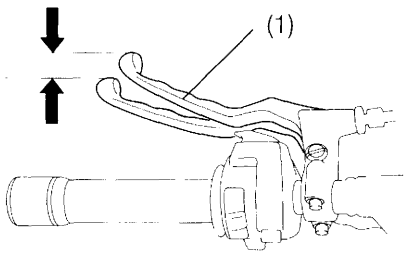
http://mototh.com

CLUTCH

Clutch adjustment may be required if the motorcycle stalls when shifting into gear or tends to creep; or if the clutch slips, causing acceleration to lag behind engine speed. Minor adjustments can be made with the clutch cable adjuster (3) at the lever (1).

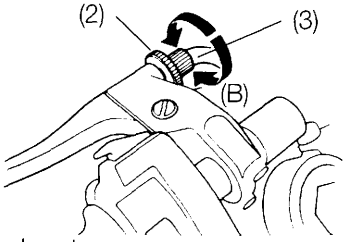
Normal clutch lever free play is :

10-20 mm (0.4-0.8 in)



(1) Clutch lever

1. Loosen the lock nut (2) and turn the adjuster (3). Tighten the lock nut (2) and check the adjustment.
2. If the adjuster is threaded out near its limit or if the correct free play cannot be obtained, loosen the lock nut (2) and turn in the cable adjuster (3) completely. Tighten the lock nut (2).



(2) Lock nut
(3) Clutch cable adjuster
(A) Decrease free play
(B) Increase free play

http://mototh.com

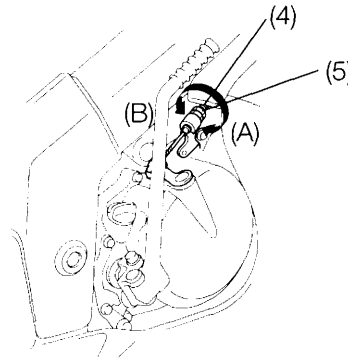
3. Loosen the lock nut (4) at the lower end of the cable. Turn the adjusting nut (5) to obtain the specified free play. Tighten the lock nut (4) and check the adjustment.
4. Start the engine, pull in the clutch lever and shift into gear. Make sure the engine does not stall and the motorcycle does not creep. Gradually release the clutch lever and open the throttle. The motorcycle should begin to move smoothly and accelerate gradually.

NOTE :

- If proper adjustment cannot be obtained or the clutch does not work correctly, see your authorized Honda dealer.

Other Checks :

Check the clutch cable for kinks or signs of wear that could cause sticking or failure. Lubricate the clutch cable with a commercially available cable lubricant to prevent premature wear and corrosion.



(4) Lock nut (A) Increase free play
(5) Adjusting nut (B) Decrease free play

http://mototh.com

COOLANT

Coolant Recommendation

The owner must properly maintain the coolant to prevent freezing, overheating, and corrosion. Use only high quality ethylene glycol antifreeze containing corrosion protection inhibitors specifically recommended for use in aluminum engines.
(SEE ANTIFREEZE CONTAINER LABEL.)

CAUTION :

- **Use only low-mineral drinking water or distilled water as a part of the antifreeze solution. Water that is high in mineral content or salt may be harmful to the aluminum engine.**

The factory provides a 50/50 solution of antifreeze and distilled water in this motorcycle. This coolant solution is recommended for most operating temperatures and provides good corrosion protection. A higher concentration of antifreeze decreases the cooling system performance and is recommended only when additional protection against freezing is needed. A concentration of less than 40/60 (40% antifreeze) will not provide proper corrosion protection. During freezing temperatures, check the cooling system frequently and add higher concentrations of antifreeze (up to a maximum of 60% antifreeze) if required.

http://mototh.com

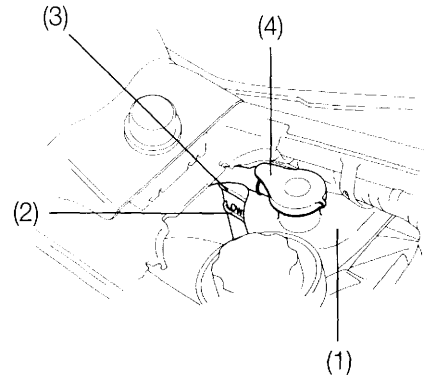
Inspection

The reserve tank is under the front seat. Check the coolant level in the reserve tank (1) while the engine is at the normal operating temperature with the motorcycle in an uplight position. If the coolant level is below the LOW level mark (2), remove the reserve tank cap (3). Add coolant mixture until it reaches the UPPER level mark (4). Do not remove the radiator cap.

⚠ WARNING

- **Do not remove the radiator cap when the engine is hot. The coolant is under pressure and could scald you.**

If the reserve tank is empty, or if coolant loss is excessive, check for leaks and see your authorized Honda dealer for repair.



(1) Reserve tank
(2) LOWER level mark
(3) UPPER level mark
(4) Reserve tank cap

http://mototh.com

FUEL

Fuel Cock

The fuel cock (1) is under the left side of the fuel tank. Set it to ON for normal operation or RES when you start to run out of the main fuel supply. The OFF setting is only for long term storage or servicing of fuel system components.

Reserve Fuel

When the main fuel supply is gone, turn the fuel cock to RES. Refill the tank as soon as possible after switching to RES, then switch the cock back to ON.

The reserve fuel supply is :

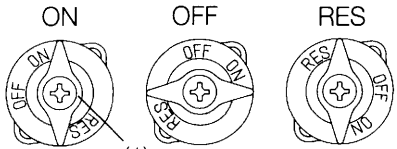
2.7 l (0.7 US gal, 0.6 Imp gal)

⚠ WARNING

- **To avoid running out of fuel that may result in a sudden stop, learn how to operate the fuel cock when riding the motorcycle.**

NOTE :

- Remember to check that the fuel cock is in the ON position each time you refuel. If the cock is left in the RES position, you may run out of fuel with no reserve.



(1) Fuel cock

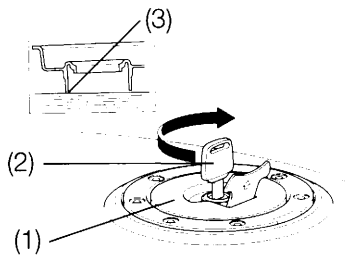
http://mototh.com

Fuel Tank

The fuel tank capacity including the reserve supply is :

10.5 l (2.8 US gal, 2.3 Imp gal)

To open the fuel fill cap (1), insert the ignition key (2) and turn it clockwise. The fuel fill cap is hinged and will lift up.



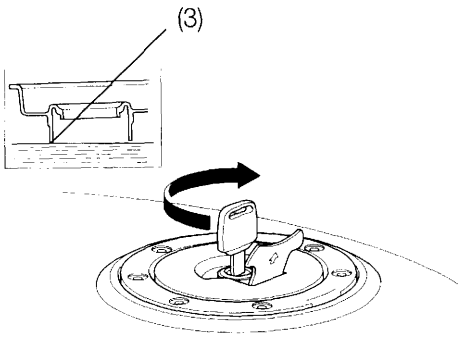
(1) Fuel fill cap
(2) Ignition key
(3) Filler neck

After refueling, to close the fuel fill cap, push the fuel fill cap into the filler neck until it snaps closed and locks. Remove the key. Use unleaded or lowlead petrol with a research octane number of 91 or higher. We recommend that you use unleaded petrol because it produces fewer engine and spark plug deposits and extends the life of exhaust system components.

CAUTION :

- **If "spark knock" or "pinking" occurs at a steady engine speed under normal load, change brands of petrol. If spark knock or pinking persists, consult your authorized Honda dealer. Failure to do so is considered misuse, and damage caused by misuse is not covered by Honda's Limited Warranty.**

http://mototh.com



(3) Filler neck

⚠ WARNING

- **Petrol is extremely flammable and is explosive under certain conditions. Refuel in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where petrol is stored or where the fuel tank is refueled.**
- **Do not overfill the tank (there should be no fuel in the filler neck (3). After refueling, make sure the fuel fill cap is closed securely.**
- **Be careful not to spill fuel when refueling. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.**
- **Avoid repeated or prolonged contact with skin or breathing of vapor. KEEP OUT OF REACH OF CHILDREN.**

http://mototh.com

Petrol Containing Alcohol

If you decide to use a petrol containing alcohol (gasohol), be sure it's octane rating is at least as high as that recommended by Honda. There are two types of "gasohol": one containing ethanol, and the other containing methanol. Do not use petrol that contains more than 10% ethanol. Do not use petrol containing methanol (methyl or wood alcohol) that does not also contain cosol-vents and corrosion inhibitors for methanol. Never use petrol containing more than 5% methanol, even if it has cosolvents and corrosion inhibitors.

NOTE :

- Fuel system damage or engine performance problems resulting from the use of fuels that contain alcohol is not covered under the warranty. Honda cannot endorse the use of fuels containing methanol since evidence of their suitability is as yet incomplete.
- Before buying fuel from an unfamiliar staion, try to find out if the fuel contains alcohol. If it does, confirm the type and percentage of alcohol used. If you notice any undesirable operating symptoms while using a petrol that contains alcohol, or one that you think contains alcohol, switch to a petrol that you know does not contain alcohol.

http://mototh.com

ENGINE OIL

Oil Level

When the low oil level indicator lights, it means the oil level in the oil tank is low; stop the engine and fill the oil tank as soon as possible.

⚠ WARNING

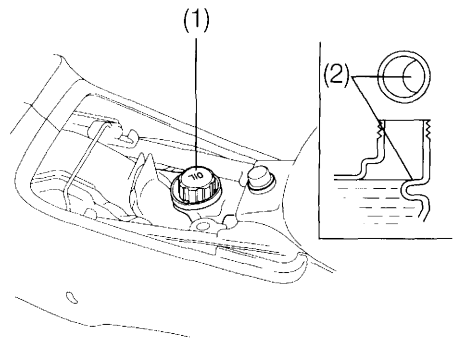
- **If the low oil level indicator comes on while riding, stop riding and shut the engine off. Fill the oil tank to the UPPER level ridge with the recommended oil (see page 28). Continuing to ride with a low oil level may lead to engine failure that could result in an accident.**

CAUTION :

- **If the engine has been run after the low oil level indicator has come on, the motorcycle must be taken to an authorized Honda dealer for inspection and bleeding of the oil system. Failure to do this will result in serious engine damage.**

To fill, remove the front seat (page 36), remove the oil tank cap (1), and fill with the recommended oil up to the UPPER LEVEL ridge (2).

Oil capacity : 1.2 l



(1) Oil tank cap
(2) Upper level ridge

http://mototh.com

Oil Recommendation:

USE HONDA 2-STROKE OIL OR AN EQUIVALENT

CAUTION :

- **The use of improper oils may cause excessive and/or premature carbon buildup in the engine and exhaust system, resulting in loss of power and possible engine damage. Genuine Honda 2-stroke Oil has been specifically designed and tested in Honda scooters and is a proper oil.**

NOTE :

- When filling, do not let dirt or other foreign materials enter the tank.

http://mototh.com

TUBELESS TYRES

This motorcycle is equipped with tubeless tyres, valves, and wheel rims. Use only tyres marked "TUBELESS" and tubeless valves on rims marked "TUBELESS TYRE APPLICABLE".

Proper air pressure will provide maximum stability, riding comfort and tyre life.

Check tyre pressure frequently and adjust if necessary.

NOTE :

- Tyre pressure should be checked before you ride while the tyres are "cold".
- Tubeless tyres have some degree of selfsealing ability if they are punctured, and leakage is often very slow. Inspect very closely for punctures, especially if the tyre is not fully inflated.

Tyre size	
Front 90/80 - 17 46S Rear 120/80 - 17 61S	
Cold tyre pressure kPa (kgf/cm^2, psi)	Rider only
	Front 200 (2.0, 29) Rear 200 (2.0, 29)
	Rider and passenger
	Front 200 (2.0, 29) Rear 200 (2.0, 29)
Tyre brand	IRC Front NF46 Rear NR57

http://mototh.com

Check the tyres for cuts, embedded nails or other sharp objects. Check the rims for dents or deformation. If there is any damage, see your authorized Honda dealer for repair, replacement, and balancing.

⚠ WARNING

- **Improper tyre inflation will cause abnormal tread wear and create a safety hazard. Underinflation may result in the tyre slipping on, or coming off of the rim causing tyre deflation that may result in a loss of vehicle control.**
- **Operation with excessively worn tyres is hazardous and will adversely affect traction and handling.**

Replace tyres before tread depth at the center of the tyre reaches the following limit:

Minimum tread depth	
Front :	1.5 mm (0.06 in)
Rear :	2.0 mm (0.08 in)

http://mototh.com

Tyre Repair/Replacement:

See your authorized Honda Dealer.

⚠ WARNING

- **The use of tyres other than those listed on the tyre information label may adversely affect handling.**
- **Do not install tube-type tyres on tubeless rims. The beads may not seat and the tyres could slip on the rims, causing tyre deflation that may result in a loss of vehicle control.**
- **Do not install a tube inside a tubeless tyre. Excessive heat build-up may cause the tube to burst resulting in rapid tyre deflation that may result in a loss of vehicle control.**
- **Proper wheel balance is necessary for safe, stable handling of the motorcycle. Do not remove or change any wheel balance weights. When wheel balancing is required, see your authorized Honda dealer. Wheel balancing is required after tyre repair or replacement.**

⚠ WARNING

- **To avoid possible repair failure and tyre deflation that may result in a loss of vehicle control, do not exceed 80 km/h (50 mph) for the first 24 hours, or 130 km/h (80 mph) at any time, after tyre repair.**
- **Replace the tyre if the sidewall is punctured or damaged. Sidewall flexing may cause repair failure and tyre deflation that may result in a loss of vehicle control.**

CAUTION :

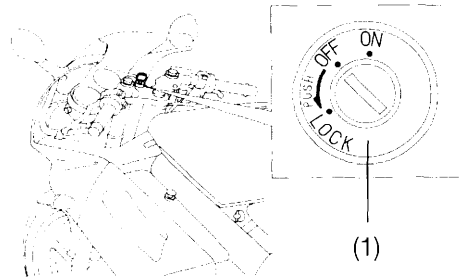
- **Do not try to remove tubeless tyres without special tools and rim protectors. You may damage the rim sealing surface or disfigure the rim.**

http://mototh.com

ESSENTIAL INDIVIDUAL COMPONENTS

IGNITION SWITCH

The ignition switch (1) is below the indicator panel.



(1) Ignition switch

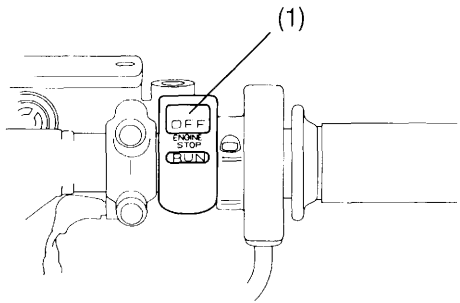
Key Position	Function	Key Removal
LOCK (steering lock)	Steering is locked. Engine and lights cannot be operated.	Key can be removed
OFF	Engine and lights cannot be operated.	Key can be removed
ON	Engine and lights can be operated.	Key cannot be removed

http://mototh.com

RIGHT HANDLEBAR CONTROLS

Engine Stop Switch

The engine stop switch (1) is next to the throttle grip. When the switch is in the RUN position, the engine will operate. When the switch is in the OFF position, the engine will not operate. This switch is intended primarily as a safety or emergency switch and should normally remain in the RUN position.



(1) Engine stop switch

http://mototh.com

LEFT HANDLEBAR CONTROLS

Headlight Switch (1)

The headlight switch (1) has two positions: H and OFF, marked by a white dot under H.

H : Headlight, taillight, position light and meter lights on.

OFF (dot) : Headlight, taillight, position light and meter lights off.

Headlight Dimmer Switch (2)

Push the dimmer switch to "HI" to select high beam or to "LO" to select low beam.

Passing Light Control Switch (3)

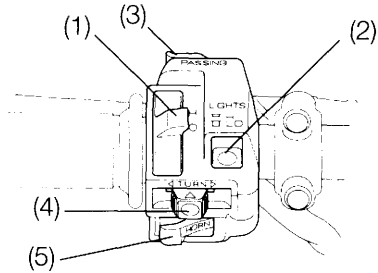
When this switch is pressed, the headlight flashes on to signal approaching cars or when passing.

Turn Signal Switch (4)

Move to ◀ to signal a left turn, ▶ to signal a right turn. Press to turn signal off.

Horn Button (5)

Press the button to sound the horn.



(1) Headlight switch
(2) Headlight dimmer switch
(3) Passing light control switch
(4) Turn signal switch
(5) Horn button

http://mototh.com

FEATURES

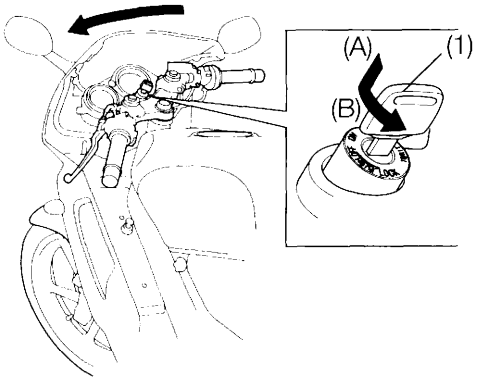
(Not required for operation)

STEERING LOCK

To lock the steering, turn the handlebars all the way to the left or right, turn the key (1) to LOCK while pushing in. Remove the key.

⚠ WARNING

- **Do not turn the key to LOCK while riding the motorcycle; loss of vehicle control will result.**



(1) Ignition key
(A) Push in
(B) Turn to LOCK

http://mototh.com

SEAT

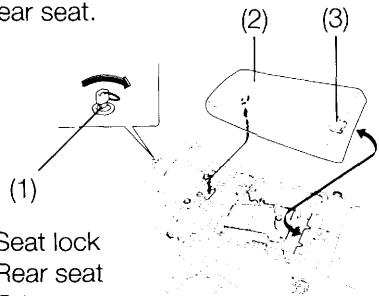
Rear seat

Removal :

1. Insert the ignition key into the seat lock (1) and turn it clockwise.
2. Pull the rear seat (2) back and up.

Installation :

1. Insert the tab (3) into the recess under the frame. Push down on the rear of the rear seat.



(1) Seat lock
(2) Rear seat
(3) Tab

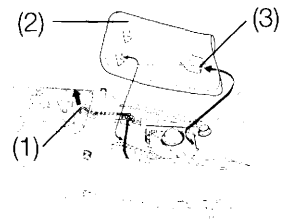
Front seat

Removal :

1. Remove the rear seat.
2. Pull the seat lock lever (1) up. Then pull the front seat (2) up and back.

Installation :

1. Insert the tab (3) into the recess under the frame.
2. Push down on the rear of the front seat.



(1) Seat lock lever
(2) Front seat
(3) Tab

http://mototh.com

HELMET HOLDER

The helmet holders are located below the rear seat.

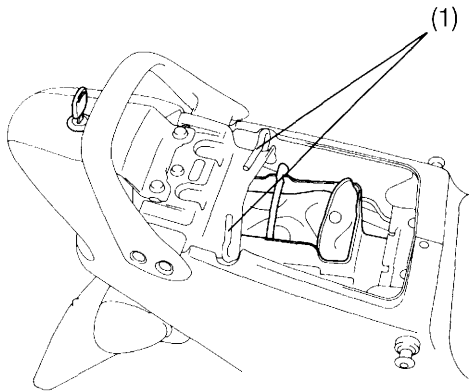
Remove the rear seat (page 36).

Hang the helmets on the holder hooks (1).

Install the rear seat and lock it securely.

⚠ WARNING

- **The helmet holder is designed for helmet security while parked. Do not ride with a helmet attached to the holder; the helmet may interfere with safe operation and result in loss of control.**



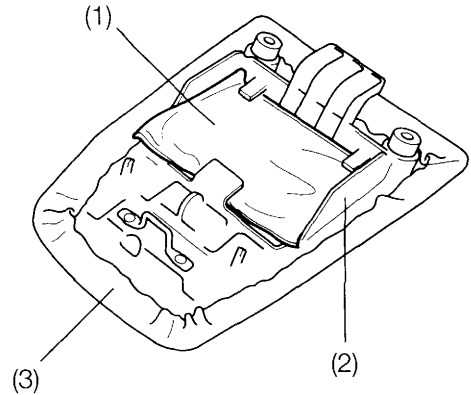
(1) Helmet holder hooks

http://mototh.com

DOCUMENT BAG

The document bag (1) is in the document compartment (2) on the reverse side of the rear seat (3).

This owner's manual and other documents should be stored in the document bag. When washing your motorcycle, be careful not to flood this area with water.



(1) Document bag
(2) Document compartment
(3) Rear seat

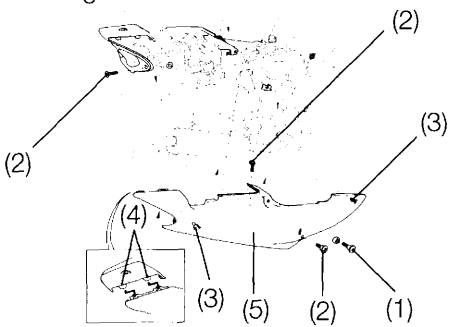
http://mototh.com

SIDE COVER

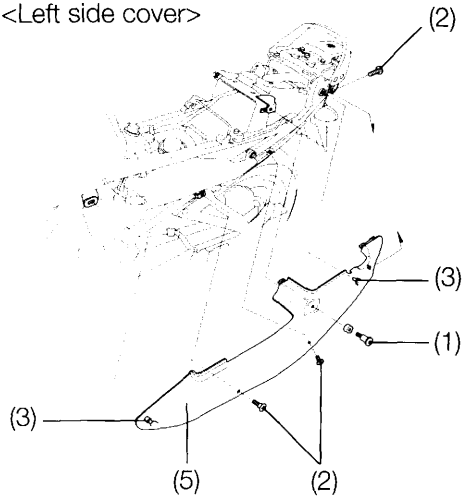
Removal :

1. Remove the rear and front seat (page 36).
2. Remove the bolt (1) and screws (2).
3. Gently pull out two prongs (3), and pull the two tabs (4) out of their slots.
4. Remove the side cover (5).

<Right side cover>



<Left side cover>



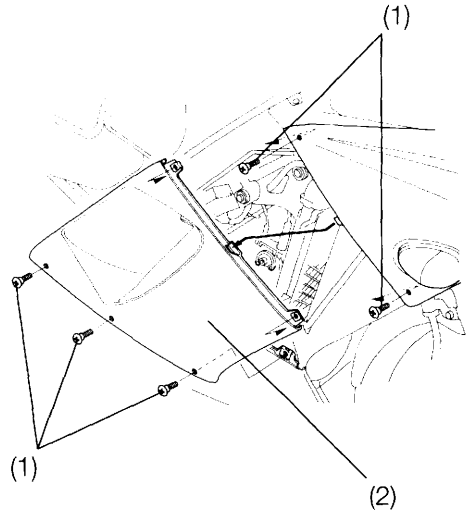
(1) Bolt
(2) Screws
(3) Prong
(4) Tab
(5) Side cover

http://mototh.com

MIDDLE FAIRING

Removal :

1. Remove the screws (1).
2. Pull down the middle fairing (2) and remove it.



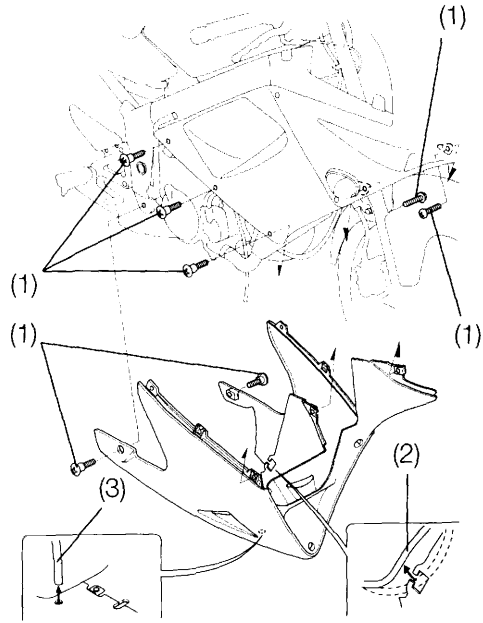
(1) Screws
(2) Middle fairing

http://mototh.com

LOWER FAIRING

Removal :

1. Remove the screws (1).
2. Remove the tachometer cable (2) from cable guide.
3. Remove the carburetor drain tube (3) from guide hole.



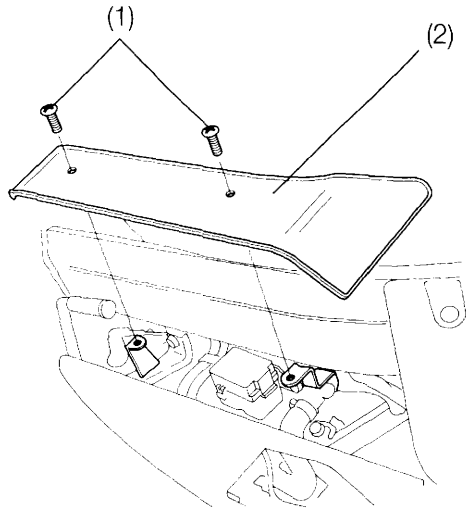
(1) Screw
(2) Tachometer cable
(3) Tube

http://mototh.com

INNER COVER

Removal :

1. Remove two screws (1).
2. Remove the inner cover (2).



(1) Screws
(2) Inner cover

http://mototh.com

OPERATION

PRE-RIDE INSPECTION

⚠ WARNING

- **If the Pre-ride Inspection is not performed, severe personal injury or vehicle damage may result.**

Inspect your motorcycle every day before you ride it. The items listed here will only take a few minutes to inspect, and in the long run they can save time, expense, and possibly your life.

1. Engine oil level - add engine oil if required (page 27). Check for leaks.
2. Fuel level - fill fuel tank when necessary (page 23). Check for leaks.
3. Coolant level - add coolant if required. Check for leaks (page 21-22).
4. Front and rear brakes - check operation; make sure there is no brake fluid leakage (page 15-18).
5. Tyres - check condition and pressure (page 29-31).
6. Drive chain - check condition and slack (page 69). Adjust and lubricate if necessary.
7. Throttle - check for smooth opening and full closing in all steering positions.
8. Lights and horn - check that headlight, tail/brake light, turn signals, indicators and horn function properly.
9. Engine stop switch - check for proper function (page 33).
10. Battery electrolyte - check the level and add if necessary (page 83).

Correct any discrepancy before you ride. Contact your authorized Honda dealer for assistance if you cannot correct the problem.

http://mototh.com

STARTING THE ENGINE

Always follow the proper starting procedure described below.

⚠ WARNING

- **Never run the engine in an enclosed area. The exhaust contains poisonous carbon monoxide gas that can cause loss of consciousness and lead to death.**
- **Do not try to start the motorcycle with the transmission in gear. You may injure yourself or damage the motorcycle.**

Preparation

Before starting, insert the key, turn the ignition switch ON and confirm the following;

- The Transmission is in NEUTRAL (neutral indicator ON).
- The engine stop switch is at RUN.
- The fuel cock is ON.

http://mototh.com

Starting Procedure

Cold engine:

1. Pull the choke knob (1) up all the way to Fully ON (A).
2. With the throttle closed, operate the kick starter with the right foot, starting from the top of the stroke and following through to the bottom with a rapid and continuous motion.
   (If you cannot start the engine; follow the "Warm engine" starting procedure.)

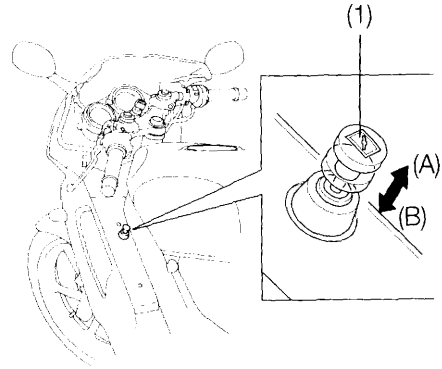
CAUTION :

- **Do not operate the kickstarter pedal while the engine is running as engine damage could result. Do not apply excessive force on the starter pedal.**
- **Fold up the kickstarter pedal after the kickstarter is returned to the pedal stop.**

3. Warm up the engine until it runs smoothly with the choke knob Fully OFF (B).

Warm engine:

1. Do not use the choke.
2. Open the throttle 1/8 - 1/4 turn.
3. Operate the kickstarter.



(1) Choke knob
(A) Fully ON
(B) Fully OFF

http://mototh.com

Flooded Engine

If the engine fails to start after several repeated attempts, it may have become flooded with excess fuel. To clear the engine, turn the engine stop switch OFF and push the choke knob to Fully OFF (B). Open the throttle fully and crank the engine several times with the kickstarter. Turn the engine stop switch to RUN and open the throttle slightly; start the engine.

http://mototh.com

RUNNING-IN

During initial running-in newly machined surfaces will be in contact with each other and these surfaces will wear in quickly. Running-in maintenance at 1,000 km (600 miles) is designed to compensate for this initial minor wear. Timely performance of the running-in maintenance will ensure optimum service life and performance from the engine.

The general rules as follows:

1. Never labour the engine with full throttle at low engine speeds. This rule is applicable not only during running-in but at all times.
2. Maximum continuous engine speed during the first 1,000 km (600 miles) must not exceed 8,000 min^{-1} (rpm).
3. Increase the maximum continuous engine speed by 2,000 min (rpm) between odometer readings of 1,000 km (600 miles) and 1,600 km (1,000 miles). Drive briskly, vary speeds frequently and use full throttle for short bursts only. Do not exceed 10,000 min^{-1} (rpm).
4. Upon reaching an odometer reading of 1,600 km (1,000 miles), you can subject the motorcycle to full throttle operation. However, do not exceed 11,000 min (rpm) indicated by the beginning of the tachometer red zone. (Do not let the tachometer needle enter the red zone.)

CAUTION :

- **Running the engine beyond recommended maximum engine speed (the beginning of the tachometer red zone) can damage the engine.**

http://mototh.com

RIDING

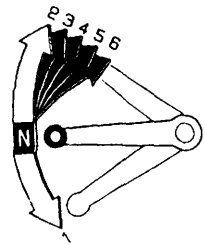
⚠ WARNING

- **Review Motorcycle Safety (pages 1-5) before you ride.**

NOTE :

- Make sure you understand the function of the side stand mechanism. (See MAINTENANCE SCHEDULE on page 54 and explanation for SIDE STAND on page 74).

1. After the engine has been warmed up, the motorcycle is ready for riding.
2. While the engine is idling, pull in the clutch lever and depress the gearshift pedal to shift into 1st (low) gear.
3. Slowly release the clutch lever and at the same time gradually increase engine speed by opening the throttle. Coordination of the throttle and clutch lever will assure a smooth positive start.
4. When the motorcycle attains a moderate speed, close the throttle, pull in the clutch lever and shift to 2nd gear by raising the gearshift pedal. This sequence is repeated to progressively shift to 3rd, 4th, 5th and 6th (top) gear.
5. Coordinate the throttle and brakes for smooth deceleration.
6. Both front and rear brakes should be used at the same time and should not be applied strongly enough to lock the wheel, or braking effectiveness will be reduced and control of the motorcycle be difficult.



http://mototh.com

BRAKING

1. For normal braking, gradually apply both the front and rear brakes while down-shifting to suit your road speed.
2. For maximum deceleration, close the throttle and apply the front and rear brakes firmly. Pull in the clutch lever before coming to a complete stop to prevent stalling the engine.

⚠ WARNING

- **Independent use of only the front or rear brake reduces stopping performance. Extreme braking may cause either wheel to lock, reducing control of the motorcycle.**
- **When possible, reduce speed or brake before entering a turn; closing the throttle or braking in mid-turn may cause wheel slip. Wheel slip will reduce control of the motorcycle.**

⚠ WARNING

- **When riding in wet or rainy conditions,or on loose surfaces, the ability to maneuver and stop will be reduced. All of your actions should be smooth under these conditions. Rapid acceleration, braking or turning may cause loss of control. For your safety, exercise extreme caution when braking, accelera-ting or turning.**
- **When descending a long, steep grade, use engine compression braking by downshifting, with intermittent use of both brakes. continuous brake application can overheat the brakes and reduce their effectiveness.**
- **Riding with your foot resting on the brake pedal or your hands on the brake lever may actuate the brakelight, giving a false indication to other drivers. It may also overheat the brake, reducing effectiveness.**

http://mototh.com

PARKING

1. After stopping the motorcycle, shift the transmission into neutral, turn the fuel cock OFF, turn the handlebar fully to the left, turn the ignition switch OFF and remove the key.
2. Use the side stand to support the motorcycle while parked.

CAUTION :

- **Park the motorcycle on firm, level ground to prevent it from falling over.**
- **If you must park on a slight incline, aim the front of the motorcycle uphill to reduce the possibility of rolling off the side stand or overturning.**

3. Lock the steering to help prevent theft (page 35).

http://mototh.com

ANTI-THEFT TIPS

1. Always lock the steering and never leave the key in the ignition switch. This sounds simple but people do forget.
2. Be sure the registration information for your motorcycle is accurate and current.
3. Park your motorcycle in a locked garage whenever possible.
4. Use an additional anti-theft device of good quality.
5. Put your name, address, and phone number in this Owner's Manual and keep it on your motorcycles at all times.
   Many times stolen motorcycles are identified by information in the Owner's Manuals that are still with them.

NAME :_____

ADDRESS :_____

_____

_____

PHONE NO :_____

http://mototh.com

MAINTENANCE

- The Required Maintenance Schedule specifies how often you should have your motorcycle served, and what things need attention. It is essential that your motorcycle be served as scheduled to retain its high level of safety, dependability, and emission control performance.
- These instructions are based on the assumption that the motorcycle will be used exclusively for its designed purpose. Sustained high speed operation, or operation in unusually wet of dusty conditions, will require more frequent service than specified in the MAINTENANCE SCHEDULE. Consult your authorized Honda dealer for recommendations applicable to your individual needs and use.

http://mototh.com

MAINTENANCE SCHEDULE

The following Maintenance Schedule specifies all maintenance required to keep your motorcycle in peak operating condition. Maintenance work should be performed in accordance with standards and specifications of Honda by properly trained and equipped technicians. Your authorized Honda dealer meets all of these requirements. Perform the Pre-ride Inspection (page 43) at each scheduled maintenance period.

I: INSPECT AND CLEAN, ADJUST, LUBRICATE OR REPLACEMENT IF NECESSARY
C: CLEAN R: REPLACE A: ADJUST L: LUBRICATE

	FREQUENCY / ITEM	WHICHEVER → COMES FIRST ↓ NOTE	x1,000 km / x1,000 mi / MONTH	ODOMETER READING (NOTE 1) 1 / 0.6	4 / 2.5 / 6	8 / 5 / 12	12 / 7.5 / 18	REFER TO PAGE
*	FUEL LINE				I	I	I	–
*	FUEL STRAINER SCREEN				C	C	C	–
*	THROTTLE OPERATION				I	I	I	66
**	OIL PUMP AND OIL LINE				I	I	I	–
*	AIR CLEANER	(NOTE 2)			C	C	C	–
	SPARK PLUG		EVERY 2,000 km = C, EVERY 4,000 km = R					64
**	DECARBONIZING					C		–
	ENGINE IDLE SPEED			I	I	I	I	68
*	RADIATOR COOLANT	(NOTE 3)				I		21
*	COOLING SYSTEM					I		–

http://mototh.com

	ITEM	FREQUENCY / WHICHEVER COMES FIRST ↓ / NOTE	x1,000 km	1	4	8	12	REFER TO PAGE
			x1,000 mi	0.6	2.5	5	7.5	
			MONTH		6	12	18	
	TRANSMISSION OIL						R	61
	DRIVE CHAIN			EVERY 1,000 km (600 mi) I,L				69
	DRIVE CHAIN SLIDER				I	I	I	73
	BATTERY				I	I	I	81
	BRAKE FLUID	(NOTE 3)			I	I	I	15
	BRAKE PADS WEAR				I	I	I	75
	BRAKE SYSTEM			I	I	I	I	15, 75
*	BRAKE LIGHT SWITCH				I	I	I	90
*	HEADLIGHT AIM				I	I	I	–
	CLUTCH SYSTEM			I	I	I	I	19
	SIDE STAND				I	I	I	74
*	SUSPENSION				I	I	I	–
*	NUTS, BOLTS, FASTENERS			I		I		–
**	WHEELS/TYRES				I	I	I	–
**	STEERING HEAD BEARING			I			I	–

http://mototh.com

* SHOULD BE SERVICES BY YOUR AUTHORIZED HONDA DEALER, UNLESS THE OWNER HAS PROPER TOOLS AND SERVICE DATA AND IS MECHANICALLY QUALIFIED. REFER TO THE OFFICIAL HONDA SHOP MANUAL.
** IN THE INTEREST OF SAFETY, WE RECOMMEND THESE ITEMS BE SERVICES ONLY BY YOUR AUTHORIZED HONDA DEALER.

Honda recommends that your authorized Honda dealer should road test your motorcycle after each periodic maintenance is carried out.

NOTES : 1. At higher odometer readings, repeat at the frequency interval established here.
2. Service more frequently when riding in unusually wet or dusty areas.
3. Replace every 2 years, replacement requires mechanical skill.

http://mototh.com

TOOL KIT

Tool kit (1) is in the tool box (2) under the rear seat (page 36).

Some roadside repairs, minor adjustments and parts replacement can be performed with the tools contained in the kit.

- 8x10 mm open end wrench
- 10x12 mm open end wrench
- 14x17 mm open end wrench
- 19 mm box end wrench
- 22 mm box end wrench
- 5 mm hex wrench
- Standard/Phillips screwdriver
- Pliers
- Spark plug wrench/screwdriver handle
- Pin spanner
- Extension bar
- Tool bag

http://mototh.com

SERIAL NUMBERS

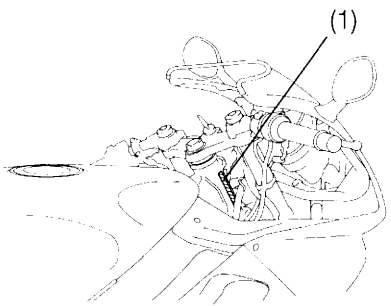
The frame and engine serial numbers are required when registering your motorcycle. They may also be required by your dealer when ordering replacement parts. Record the numbers here for your reference.

FRAME NO. _____

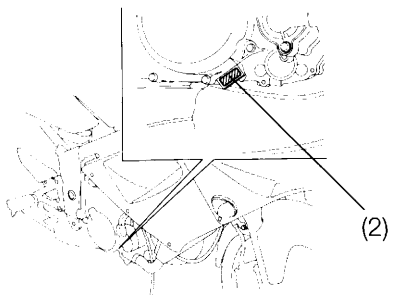
The frame number (1) is stamped on the right side of the steering head.

ENGINE NO. _____

The engine number (2) is stamped on the right side of the crankcase.



(1) Frame number



(2) Engine number

http://mototh.com

MAINTENANCE PRECAUTIONS

⚠ WARNING

- **If your motorcycle is overturned or involved in a collision, inspect control levers, cables, brake hoses, calipers, accessories, and other vital parts for damage. Do not ride the motorcycle if damage impairs safe operation. Have your authorized Honda dealer inspect the major components, including frame, suspension and steering parts, for misalignment and damage that you may not be able to detect.**
- **Use new, genuine Honda parts or their equivalent for maintenance and repair. Parts which are not of equivalent quality may impair the safety of your motorcycle and the effective operation of the emission control systems.**

⚠ WARNING

- **Stop the engine and support the motorcycle securely on a firm, level surface before performing any maintenance.**

http://mototh.com

MAINTENANCE STAND

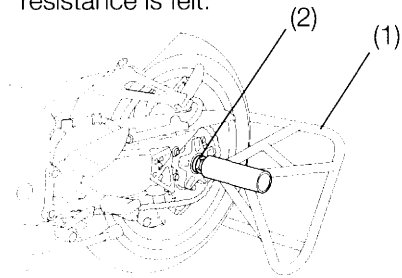
Use two people to place the motorcycle on the maintenance stand.

⚠ WARNING

- **Improper use of the maintenance stand may cause injury.**
  - **Be sure the maintenance stand is placed on a firm, level ground.**
  - **Never ride the motorcycle on the maintenance stand or run the engine while the motorcycle is on the maintenance stand.**
  - **Be sure the maintenance stand is fully engaged and the attaching bolt is fastened securely before working on the motorcycle.**

To install :

1. Support the motorcycle on a firm, level ground using the side stand.
2. Install the maintenance stand on the motorcycle as follows:
   ① Align the top ends of the maintenance stand (1) with the rear axle nut (2).
   ② Turn the attaching bolt (3) in until resistance is felt.



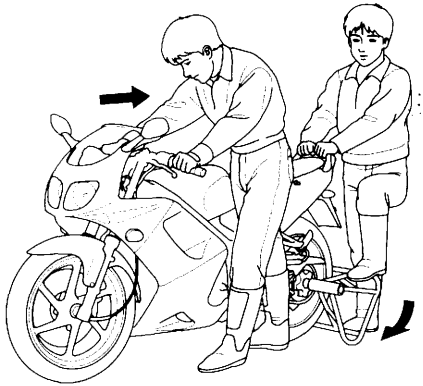
(1) Maintenance stand
(2) Rear axle nut

http://mototh.com

3. Raising the motorcycle onto the stand as follows:
   ① While holding the handlebars, support the motorcycle upright and retract the side stand.
   ② Have an assistant check that the attaching bolt is tightened securely and is aligned with the rear axle nut properly. If necessary, reinstall the maintenance stand.
   ③ Have the assistant rest his right foot on the maintenance stand and his hands on the rear of the rear cowl.
   ④ Pull the motorcycle backward while simultaneously, letting the assistant shift his weight onto the maintenance stand.

CAUTION :

- **Do not pull up on the rear cowl during this operation.**



To remove :

1. Retract the side stand.
2. Hold the handlebars and push the motorcycle forward.
3. Lower the side stand and support the motorcycle on it.
4. Remove the maintenance stand.

http://mototh.com

TRANSMISSION OIL

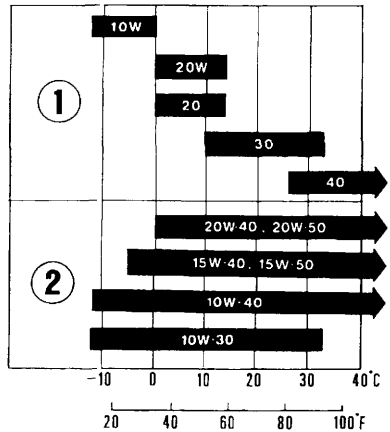
(Refer to the maintenance precautions on page 58)

Transmission Oil

Good transmission oil has many desirable qualities. Use only high detergent, quality motor oil certified on the container to meet or exceed requirements for API Service Classification SE, SF or SG.

Viscosity :

Viscosity grade of transmission oil should be based on average atmospheric temperature in your riding area. The following provides a guide to the selection of the proper grade or viscosity of oil to be used at various atmospheric temperatures.



(1) Single grade
(2) Multi grade

http://mototh.com

OIL CHANGE

Transmission oil quality is the chief factor affection engine service life. Change the transmission oil when specified by the maintenance schedule.

NOTE :

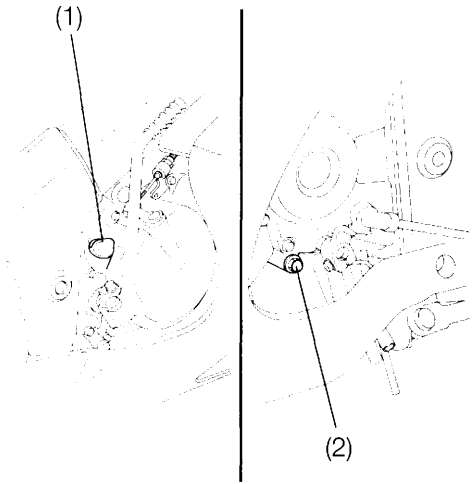
- Change transmission oil with the engine at normal operating temperature and the motorcycle with upright position to assure complete and rapid draining.

1. Start the engine and let it idle for a few minutes.
2. Stop the engine, place an oil drain pan under the crankcase. Remove the oil filler cap (1) and drain plug (2).

⚠ WARNING

- **A warmed-up engine and the oil in it are hot; be careful not to burn yourself.**

3. With the ignition switch OFF, operate the kickstarter several times to drain any oil which may be left in the engine.



(1) Oil filler cap (2) Drain plug

http://mototh.com

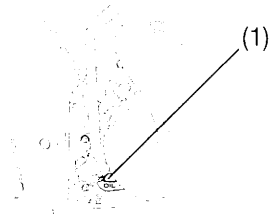
4. After the oil has completely drained, make sure the sealing washer on the drain plug is in good conditions.
5. Install the drain plug to the specified torque.
   Drain plug torque:
   21 N.m (2.1 kgf.m, 15 lbf.ft)
6. Fill the crankcase with recommended grade oil; approximately:
   0.7 l (0.7 US qt, 0.8 Imp qt)
7. With the motorcycle upright on level ground, start the engine and let it idle for a few minutes. Stop the engine and check that the oil level is at the upper level mark in the inspection window with the motorcycle upright position.
8. If required, remove the oil filler cap and add the specified oil up to the upper level mark. Do not over fill. Install the oil filler cap.
   Check for oil leaks.

CAUTION :

- **Running the engine with insufficient oil can cause serious engine damage.**

NOTE :

- Please dispose of used transmission oil in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local service station for reclamation. Do not throw it in the rubbish or pour it on the ground.



(3) Inspection window

http://mototh.com

SPARK PLUG

(Refer to the maintenance precaution on page 58)

Recommended plugs:
Standard :
B9ECS (NGK)

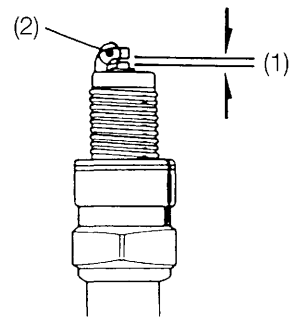
1. Disconnect the spark plug cap from the spark plug.
2. Clean any dirt from around the spark plug base. Remove the spark plug using the plug wrench furnished in the tool kit.

http://mototh.com

3. Inspect the electrode and center porcelain for deposes, erosion or carbon fouling. If the erosion or deposit is heavy, replace the plug.
   Clean a carbon or wet-fouled plug with a plug cleaner, otherwise use a wire brush.
4. Check the spark plug gap (1) using a wire type feeler gauge. If adjustment is necessary, bend the side electrode (2) carefully.
   The gap should be:
   0.7-0.8 mm (0.028-0.031 in)
   Make sure the plug washer is in good condition.
5. With the plug washer attached, thread the spark plug in by hand to prevent cross threading.
6. Tighten a new spark plug 1/2 turn with a spark plug wrench to compress the washer. If you are reusing a plug, it should only take 1/8-1/4 turn after the plug seat.
7. Reinstall the spark plug cap.

CAUTION :

- **The spark plug must be securely tightened. An improperly tightened plug can become very hot and possibly damage the engine. Never use a spark plug with an improper heat range. Severe engine damage could result.**



(1) Spark plug gap (2) Side electrode

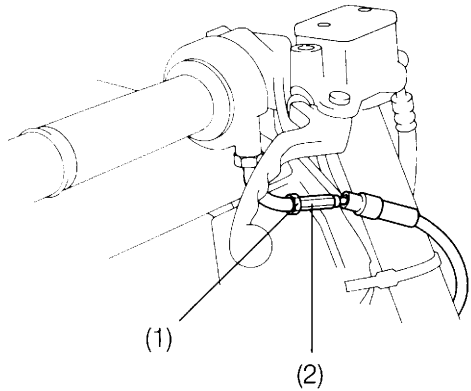
http://mototh.com

THROTTLE OPERATION

(Refer to the maintenance precaution on page 58)

1. Check for smooth rotation of the throttle grip from the fully open to the fully closed position at both full steering positions.
2. Measure the throttle grip free play at the throttle grip flange.
   The standard free play should be approx:
   2-6 mm (0.08-0.24 in)

To adjust the free play, loosen the lock nut (1) and turn the adjuster (2).



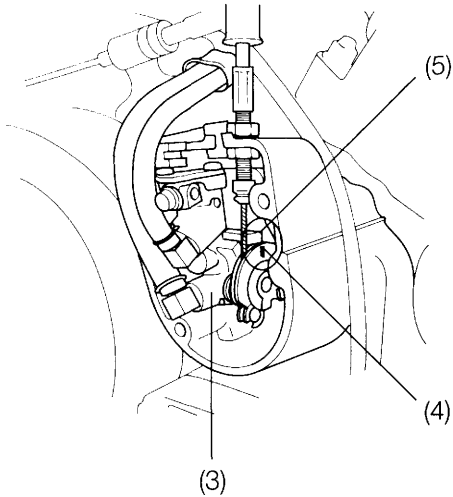
(1) Lock nut (2) Adjuster

http://mototh.com

3. Check for correct synchronization of the oil pump (3). Check the reference mark (4) aligns with the index mark (5) with the throttle fully opened. See your authorized Honda dealer if any misalignment occurs.

CAUTION :

- **Failure to perform oil pump synchronization may result in serious engine damage.**



(3) Oil pump
(4) Reference mark
(5) Index mark

http://mototh.com

IDLE SPEED

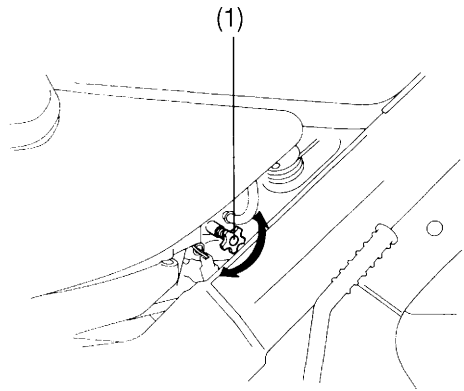
(Refet to the maintenance precaution on page 58)

The idle speed adjustment procedure given here should only be used when changes in altitude affect normal idle speed as set by your dealer. See your authorized Honda dealer for regularly scheduled carburetor adjustments, including individual carburetor adjustment and synchronization.

NOTE :

- The engine must be at normal operating temparature for accurate idle speed adjustment. Ten minutes of stop-and-go riding is sufficient.

1. Warm up the engine, shift to neutral and place the motorcycle on its stand.
2. The throttle stop screw (1) is behind the seal rubber in the left side cover. Push in the rubber.
3. Adjust idle speed with the throttle stop screw (1).
   Idle speed (In neutral):
   1,300 ± 100 rpm



(1) Throttle stop screw (A) Increase (B) Decrease

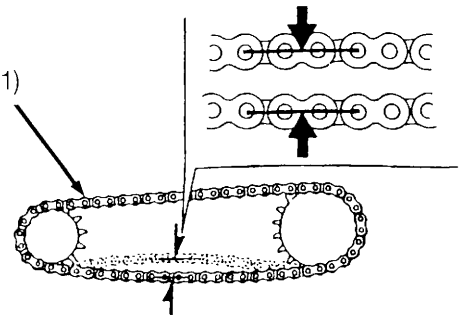
http://mototh.com

DRIVE CHAIN

(Refer to the maintenance precaution on page 58)
The service life of the drive chain is dependent upon proper lubrication and adjustment. Poor maintenance can cause premature wear or damage to the drive chain and sprockets.
The drive chain should be checked and lubricated as part of the Pre-ride Inspection (page 43). Under severe usage, or when the motorcycle is ridden in unusually dusty or muddy areas, more frequent maintenance will be necessary.

Inspection:

1. Turn the engine off, place the motorcycle on its side stand and shift the transmission into neutral.
2. Check slack in the lower drive chain run midway between the sprockets.
   Drive chain slack should be adjusted to allow the following vertical movement by hand:
   30-40 mm (1.2-1.6 in)
3. Roll the motorcycle forward. Stop. Check drive chain slack. Repeat this procedure several times. Drive chain slack should remain constant. If the chain is slack only in certain sections, some links are kinked and binding. Binding and kinking can frequently be eliminated by lubrication.



(1) Drive chain

http://mototh.com

4. Roll the motorcycle forward. Stop and place it on its side stand. Inspect the drive chain and sprockets for any of the following conditions:

DRIVE CHAIN

- Damaged Rollers
- Loose Pins
- Dry or Rusted Links
- Kinked or Binding Links
- Excessive Wear
- Improper Adjustment
- Missing O-rings

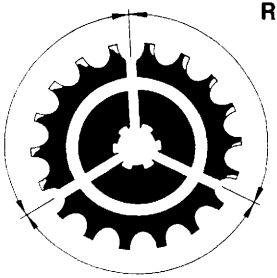
SPROCKETS

- Excessively Worn Teeth
- Broken or Damaged Teeth

A drive chain with damaged rollers, loose pins, or missing O-rings must be replaced. A chain which appears dry, or shows signs of rust, requires supplementary lubrication. Kinked or binding links should be thoroughly lubricated and worked free. If links cannot be freed, the chain must be replaced.

Damaged Sprocket Teeth **REPLACE**

Worn sprocket teeth **REPLACE**



Normal Sprocket Teeth **GOOD**

http://mototh.com

Adjustment :

Drive chain slack should be checked and adjusted, if necessary, every 1,000 km (600 miles). When operated at sustained high speeds or under conditions of frequent rapid acceleration, the chain may require more frequent adjustment.

If the drive chain requires adjustment, the procedure is as follows:

1. Turn the engine off, place the motorcycle on its side stand and shift the transmission into neutral.
2. Loosen the bearing holder pinch bolt (1).
3. Turn the bearing holder (2) clockwise or counterclockwise to obtain the proper chain slack with the pin spanner (3).
4. Torque the bearing holder pinch bolt to:
   73 N.m (7.4 kgf.m, 54 lbf.ft)
5. Recheck chain slack.

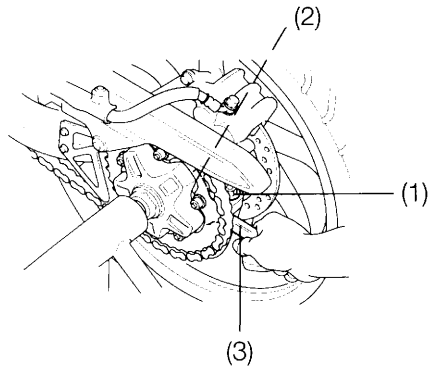
⚠ WARNING

- **If a torque wrench was not used for installation, see your authorized Honda dealer as soon as possible to verify proper assembly.**

CAUTION :

- **Damage to the bottom part of the frame may be caused by excessive drive chain slack of more than:**

  50 mm (2.0 in)



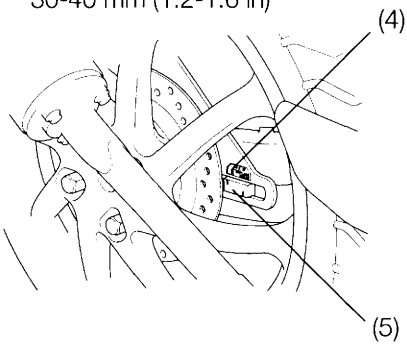
(1) Bearing holder pinch bolt
(2) Bearing holder
(3) Pin spanner

http://mototh.com

Wear inspection :

Check the chain wear label when adjusting the chain. If the red zone (4) on the label aligns with the index mark (5) after the chain has been adjusted to the proper slack, the chain is excessively worn and must be replaced. The proper slack is :

30-40 mm (1.2-1.6 in)



(4) Red zone (5) Index mark

Lubrication and cleaning :

Lubricate every 1,000 km (600 miles) or sooner if chain appears dry.

The O-rings in this chain can be damaged by steam cleaning, high pressure washers, and certain solvents. Clean the side surfaces of the chain with a dry cloth. Do not brush the rubber O-rings. Brushing will damage them. Wipe dry and lubricate only with SAE 80 or 90 gear oil. Commercial chain lubricants may contain solvents which could damage the rubber O-rings.

CAUTION :

- **The drive chain on this motorcycle is equipped with small O-rings between the link plates. These O-rings retain grease inside the chain to improve its service life. However, special precautions must be taken when adjusting, lubricating, washing, and replacing the chain.**

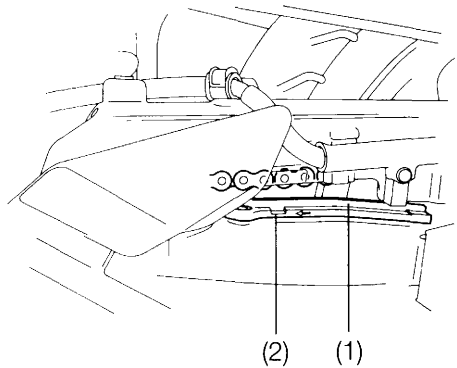
http://mototh.com

DRIVE CHAIN SLIDER

(Refer to the maintenance precaution on page 58)

Check the chain slider (1) for wear.

The chain slider must be replaced if it is worn to the bottom of the cut out (2). For replacement, see your authorized Honda dealer.



(1) Chain slider (2) Cut out

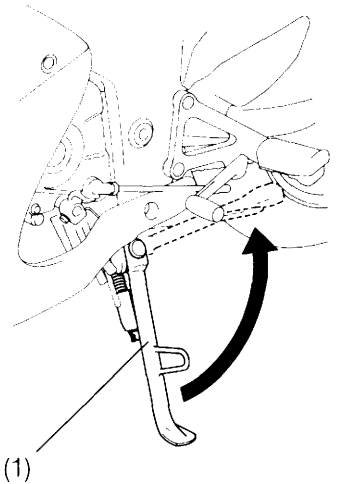
http://mototh.com

SIDE STAND

(Refer to the maintenance precaution on page 58)

Check the side stand spring for damage and loss of tension, and the side stand assembly for freedom of movement.

If the side stand is squeaky or stiff, clean the pivot area and lubricate the pivot bolt with clean engine oil.



(1) Side stand

http://mototh.com

BRAKE PAD WEAR

(Refer to the maintenance precaution on page 58)

Brake pad wear depends upon the severity of usage, the type of riding, and road conditions. (Generally, the pads will wear faster on wet and dirty roads.)

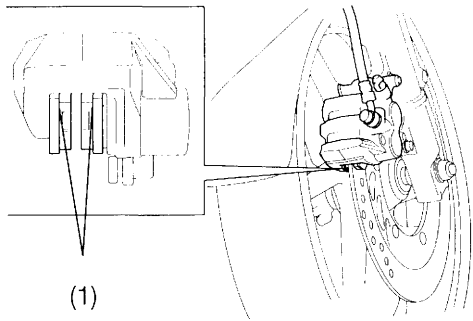
Inspect the pads at each regular maintenance interval (page 54).

Front Brake

Check the wear indicator mark (1) on each pad.

If either pad is worn to the wear indicator mark, replace both pads as a set. See your authorized Honda dealer for this service.

(FRONT BRAKE)



(1) Wear indicator mark

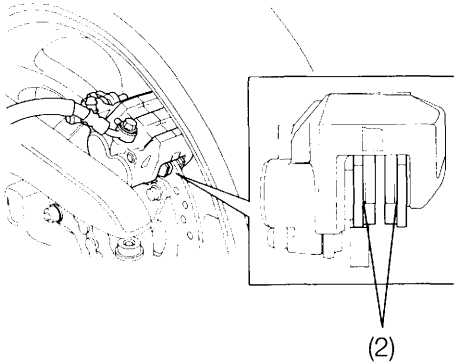
http://mototh.com

Rear Brake

Check the wear indicator mark (2) on each pad.

If either pad is worn to the wear indicator mark, replace both pads as a set. See your authorized Honda dealer for this service.

(REAR BRAKE)



(2) Wear indicator mark

http://mototh.com

WHEEL REMOVAL

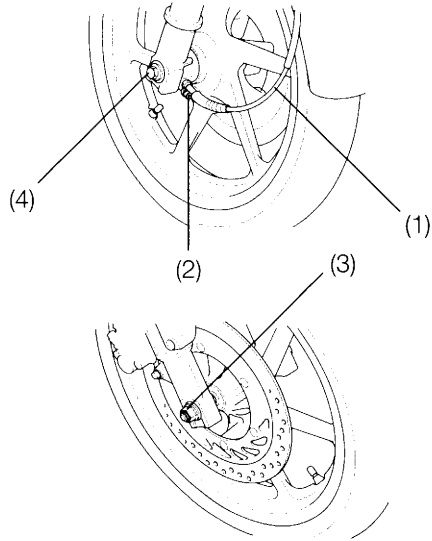
(Refer to the maintenance precaution on page 58)

Front Wheel Removal

1. Support the motorcycle with the maintenance stand (page 59).
2. Raise the front wheel off the ground by hoisting the top bridge.
3. Remove the speedometer cable (1) by removing screw (2).
4. Remove the axle nut (3).
5. Remove the axle shaft (4) and the wheel.

NOTE :

- Do not depress the brake lever when the wheel is off the motorcycle. The caliper pistons will be forced out of the cylinders with subsequent loss of the brake fluid. If this occurs, servicing of the brake system will be necessary. See your authorized Honda dealer for this service.



(1) Speedometer cable
(2) Screw
(3) Axle nut
(4) Axle shaft

http://mototh.com

Installation notes :

Reverse the removal procedure.

Position the front wheel between the fork legs and insert the axle shaft from left side, through the left fork leg and wheel hub.

Tighten the axle nut to the specified torque.

Axle nut torque:

59 N.m (6.0 kgf.m, 43 lbf.ft)

After installing the wheel, apply the brake several times and then check if the wheel rotates freely.

Recheck the wheel if the brake drags or if the wheel does not rotate freely.

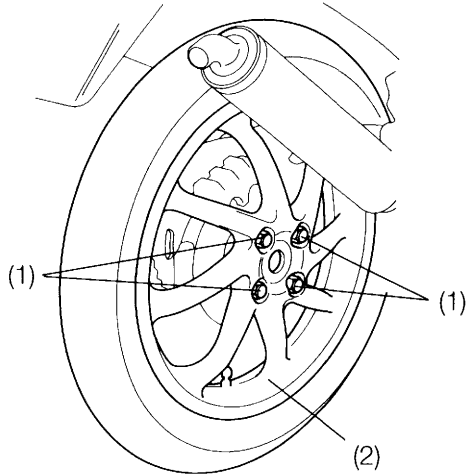
⚠ WARNING

- **If a torque wrench was not used for installation, see your authorized Honda dealer as soon as possible to verify proper assembly. Improper assembly may lead loss of braking capacity.**

http://mototh.com

Rear Wheel Removal

1. Place the motorcycle on its side stand.
2. With the rear wheel on the ground, loosen the wheel nuts (1) while applying the rear brake.
3. Raise the rear wheel off the ground with the maintenance stand (page 59).
4. Remove the wheel nuts.
5. Remove the rear wheel (2).



(1) Wheel nuts
(2) Rear wheel

http://mototh.com

Installation notes :

Reverse the removal procedure.

Tighten the wheel nuts to the specified torque.

Wheel nut torque:

108 N.m (11.0 kgf.m, 80 lbf.ft)

After installing the wheel, apply the brake several times and then check if the wheel rotates freely. Recheck the wheel if the brake drags or if the wheel does not rotate freely.

⚠ WARNING

- **If a torque wrench was not used for installation, see your authorized Honda dealer as soon as possible to verify proper assembly. Improper assembly may lead loss of braking capacity.**

http://mototh.com

BATTERY

(Refer to the maintenance precautions on page 58)

If the motorcycle is operated with insufficient battery electrolyte, sulufation and battery plate damage will occur.

If rapid loss of electrolyte is experienced, or if your battery seems to be weak, causing slow starting or other electrical problems, see your authorized Honda dealer.

CAUTION :

- **When checking the battery electrolyte level or adding distilled water, make sure the breather tube is connect to the battery breather outlet.**
- **Use only distilled water in the battery. Tap water will shorten the service life of the battery.**
- **Filling the battery above the UPPER LEVEL line may cause the electrolyte to overflow, resulting in corrosion to engine or frame parts. Immediately wash off any spilled electrolyte.**
- **The battery breather tube must be routed as shown on the label. Do not bend or twist the breather tube. A bent or kinked breather.**

http://mototh.com

⚠ WARNING

- **The battery gives off explosive gases; keep sparks, flames, and cigarettes away. Provide adequate ventilation when charging or using the battery in an enclosed space.**
- **The battery contains sulfuric acid (electrolyte). Contact with skin or eyes may cause serve burns. Wear protective clothing and a face shield.**
  - **If electrolyte gets on your skin, flush with water.**
  - **If electrolyte gets in your eyes, flush with water for at least 15 minutes and call a physician immediately.**
- **Electrolyte is poisonous.**
  - **If swallowed, drink large quantities of water or milk of magnesia or vegetable oil and call a physician.**
- **KEEP OUT OF REACH OF CHILDREN.**

http://mototh.com

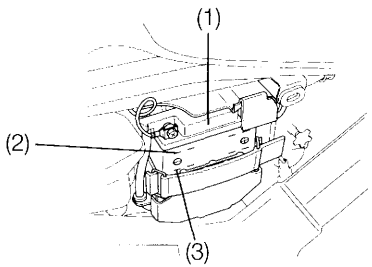
Battery electrolyte :

The battery (1) is behind the right side cover.

Check the electrolyte level with the motorcycle in an upright position on level ground. The electrolyte must be maintained between the UPPER (2) and LOWER (3) level marks on the side of the battery.

If the electrolyte level is low, remove the battery and remove the battery filler caps.

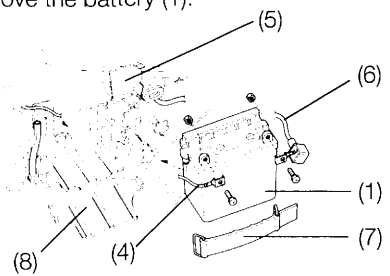
Carefully add distilled water to the UPPER level mark, using a small syringe or plastic funnel.



(1) Battery
(2) UPPER level mark
(3) LOWER level mark

Battery removal :

1. Remove the right side cover (page 39)
2. Disconnect the negative (-) terminal lead (4) from the battery.
3. Open the terminal cover (5), then disconnect the positive (+) terminal lead (6).
4. Remove the battery band (7) and open the battery cover (8).
5. Remove the battery (1).



(4) Negative (-) terminal lead
(5) Terminal cover
(6) Positive (+) terminal lead
(7) Battery band
(8) Battery cover

http://mototh.com

FUSE REPLACEMENT

(Refer to the maintenance precaution on page 58)

When frequent fuse failure occurs, it usually indicates a short circuit or an overload in the electrical system. See your authorized Honda dealer for repair.

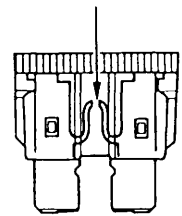
CAUTION :

- **Turn the ignition switch OFF before checking or replacing fuses to prevent accidental short-circuiting.**

⚠ WARNING

- **Never use a fuse with a different rating from that specified. Serious damage to the electrical system or a fire may result, causing a dangerous loss of lights or engine power.**

Blown fuse



http://mototh.com

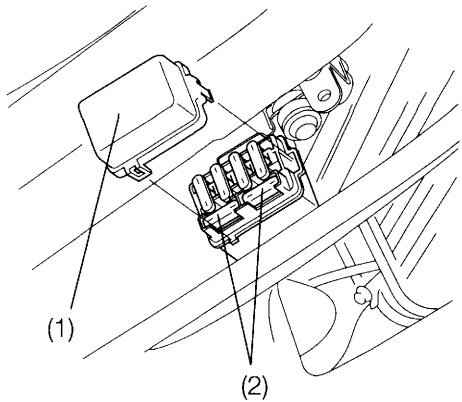
Fuse box :

The fuse box is located under the right inner cover.

The specified fuses are:

10A, 20A

1. Remove the inner fairing (page 42).
2. Open the fuse box cover (1).
3. Pull out the old fuse and install a new fuse.
4. The spare fuses (2) are located in the fuse box.
5. Close the fuse box cover and install the inner cover.



(1) Fuse box cover
(2) Spare fuses

http://mototh.com

BULB REPLACEMENT

(Refer to the maintenance precaution on page 58)

⚠ WARNING

- **The light bulb becomes very hot while the light is ON, and remain hot for a while after it is turned OFF. Be sure to let it cool down before servicing.**

CAUTION :

- **Do not put finger prints on the headlight bulb, as they may create hot spots on the bulb and cause it to break.**
- **Wear clean gloves while replacing the bulb.**
- **If you touch the bulb with your bare hands, clean it with a cloth moistened with alcohol to prevent its early failure.**

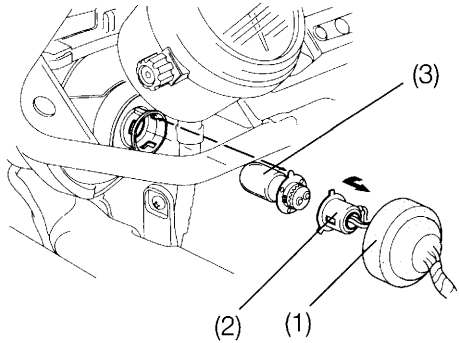
NOTE :

- Be sure to turn the ignition switch OFF when replacing the bulb.
- Do not use bulbs other than that specified.
- After installing a new bulb, check that the light operates properly.

http://mototh.com

Headlight Bulb

1. Pull back the rubber cover (1).
2. Slightly press the socket (2) and turn it counterclockwise, then remove the socket.
3. Pull out the bulb (3).
4. Install a new bulb in the reverse order of removal.

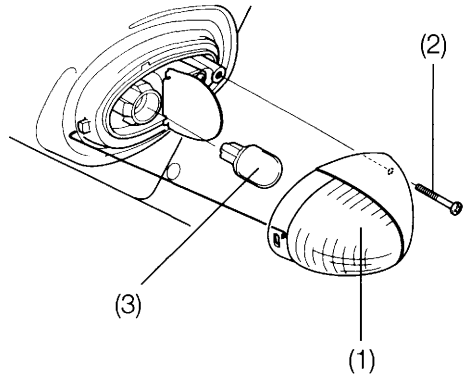


(1) Cover
(2) Socket
(3) Bulb

http://mototh.com

Front/Rear Turn Signal Bulb

1. Remove the turn signal lens (1) by removing screw (2).
2. Pull out the turn signal bulb (3).
3. Install a new bulb in the reverse order of removal.

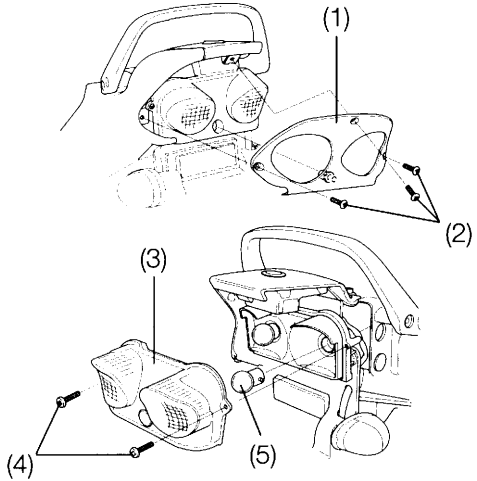


(1) Lens
(2) Screw
(3) Bulb

http://mototh.com

Stop/Tail Light Bulb

1. Remove the right side cover (page 39).
2. Remove the tail cover (1) by removing screws (2).
3. Remove the taillight lens (3) by removing screw (4).
4. Slightly press the bulb (5) and turn it counterclockwise.
5. Install a new bulb in the reverse order of removal.



(1) Tail cover
(2) Screw
(3) Lens
(4) Screw
(5) Bulb

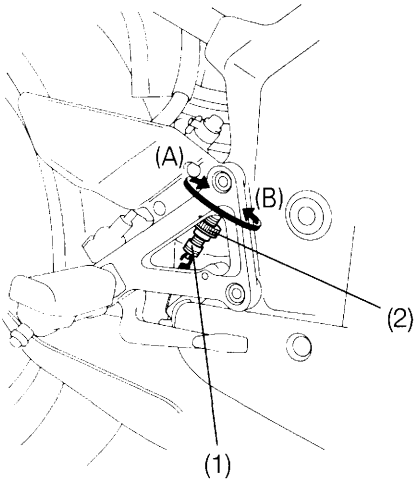
http://mototh.com

STOPLIGHT SWITCH ADJUSTMENT

(Refer to the maintenance precaution on page 58)

Check the operation of the stoplight switch (1) at the right side behind the engine from time to time.

Adjustment is done by turning the adjusting nut (2). Turn the nut in the direction (A) if the switch operates too late and in direction (B) if the switch operates too soon.



(1) Stoplight switch
(2) Adjusting nut

http://mototh.com

CLEANING

Clean your motorcycle regularly to protect the surface finishes and inspect for damage, wear and oil, coolant or fluid (brake and clutch) leakage.

CAUTION :

- **High pressure water (or air) can damage certain parts of the motorcycle.**

Avoid spraying high pressure water (typical in coinoperated car washes) at the following areas:

Ignition Switch	Instruments
Carburetors	Wheel Hubs
Drive Chain	Muffler Outlets
Under Seat	Under Fuel Tank
Handlebar Switches	
Brake Master Cylinder	
Clutch Master Cylinder	

1. After cleaning, rinse the motorcycle thoroughly with plenty of clean water. Strong detergent residue can corrode alloy parts.

NOTE :

- Clean the plastic parts using a cloth or sponge dampened with a solution of mild detergent and water. Rub the soiled area gently rinsing it frequently with fresh water.

2. Dry the motorcycle, start the engine, and let it run for several minutes.
3. Test the brakes before riding the motorcycle. Several applications may be necessary to restore normal braking performance.

⚠ WARNING

- **Braking efficiency may be temporarily impaired immediately after washing the motorcycle. Anticipate longer stopping distance to avoid a possible accident.**

4. Lubricate the drive chain immediately after washing and drying the motorcycle.

http://mototh.com

Painted Aluminum Wheel Maintenance

Aluminum may corrode from contact with dirt, mud or road salt. Clean the wheels after riding through any of those substances. Use a wet sponge and mild detergent. Avoid stiff brushes, steel wool, or cleaners containing abrasives or chemical compounds.

After washing, rinse with plenty of water and dry with a clean cloth.

Apply touch-up paint to the wheels where damage has resulted.

http://mototh.com

STORAGE GUIDE

Extended storage, such as for winter, requires that you take certain steps to reduce the effects of deterioration from non-use of the motorcycle. In addition, necessary repairs should be made BEFORE storing the motorcycle; otherwise, these repairs may be forgotten by the time the motorcycle is removed from storage.

STORAGE

1. Change the engine oil and filter.
2. Make sure the cooling system is filled with a 50/50% antifreeze solution.
3. Drain the fuel tank and carburetor into an approved petrol container. Spray the inside of the fuel tank with an aerosol rust-inhibiting oil. Reinstall the fuel fill cap on the tank.

NOTE :

- If storage will last more than one month, carburetor draining is very important, to assure proper performance after storage.

⚠ WARNING

- **Petrol is extremely flammable and is explosive under certain conditions. Perform this operation in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where petrol is drained or stored and where the fuel tank is refueled.**

http://mototh.com

4. To prevent rusting in the cylinders, perform the following:
   - Remove the spark plug caps from the spark plugs. Using tape or string, secure the caps to any convenient plastic body part so that they are positioned away from the spark plugs.
   - Remove the spark plugs from the engine and store them in a safe place. Do not connect the spark plugs to the spark plug caps.
   - Pour a tablespoon (15-20 cc) of clean engine oil into each cylinder and cover the spark plug holes with a piece of cloth.
   - Crank the engine several times to distribute the oil.
   - Reinstall the spark plugs and spark plug caps.
5. Remove the battery. Store in an area protected from freezing temperatures and direct sunlight.
   Check the electrolyte level and slow charge the battery once a month.
6. Wash and dry the motorcycle. Wax all painted surfaces. Coat chrome with rustinhibiting oil.
7. Lubricate the drive chain (page 72).
8. Inflate the tyres to their recommended pressures. Place the motorcycle on blocks to raise both tyres off the ground.
9. Cover the motorcycle (don't use plastic or other coated materials) and store in an unheated area, free of dampness with a minimum of daily tem perature variation. Do not store the motorcycle in direct sunlight.

http://mototh.com

REMOVAL FROM STORAGE

1. Uncover and clean the motorcycle. Change the engine oil if more than 4 months have passed since the start of storage.
2. Charge the battery as required. Install the battery.
3. Drain any excess aerosol rust-inhibiting oil from the fuel tank. Fill the fuel tank with fresh petrol.
4. Perform all Pre-ride Inspection checks (page 43). Test ride the motorcycle at low speeds in a safe riding area away from traffic.

http://mototh.com

SPECIFICATIONS

DIMENSIONS

Overall length	1,970 mm (77.5 in)
Overall width	685 mm (27.0 in)
Overall height	1,060 mm (41.7 in)
Wheelbase	1,335 mm (52.5 in)
Ground clearance	142 mm (5.6 in)

WEIGHT

Dry weight	122.4 kg (269.8 lbs)

CAPACITIES

2-stroke engine oil	1.2 l
Transmission oil	0.8 l (After disassembly)
	0.7 l (After draining)
Fuel tank capacity	10.5 l
Fuel reserve capacity	2.7 l
Passenger capacity	Operator and one passenger

http://mototh.com

ENGINE

Bore and stroke	59X54.5 mm (2.3X2.15 in)
Compression ratio	6.8 : 1
Displacement	149 cm^3 (9.1 cu-in)
Spark plug	
Standard	B9ECS (NGK)
Spark plug cap	0.7 - 0.8 mm (0.028 - 0.031 in)
Idle speed	1,300 ± 100 rpm

CHASSIS AND SUSPENSION

Caster	25° 36'
Trail	91 mm (3.6 in)
Tyre size, front	90/80 - 17 46S
Tyre size, rear	120/80 - 17 61S

http://mototh.com

POWER TRANSMISSION

Primary reduction	2.954
Gear ratio, 1st	2.916
2nd	1.937
3rd	1.470
4th	1.210
5th	1.043
6th	0.916
Final reduction	2.857

ELECTRICAL

Battery	12V - 3AH
Generator	0.188 kW

http://mototh.com

LIGHTS

Headlight	12V - 30/30 W
Brake/Taillight	12V - 5/18 W
Turn signal light Front	12V - 10 W
Turn signal light Rear	12V - 10 W
Instrument light	12V - 1.7 WX5
Neutral indicator	12V - 3.4 W
Turn signal indicator	12V - 1.7 W
High beam indicator	12V - 1.7 W

FUSE

Main fuse	20A
Other fuses	10A

http://mototh.com

Memo

Memo

Memo

http://mototh.com

HONDA

HONDA
ASH 01/98

Printed on recycled paper

25111998

PRINTED IN THAILAND

http://mototh.com